

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Canton

4101 Shuffel Street NW

North Canton, OH 44720

Tel: (330)497-9396

TestAmerica Job ID: 240-16113-2

Client Project/Site: Canton Drop Forge

For:

TRC Environmental Corp-Payne Firm

1382 West Ninth Street

Cleveland, Ohio 44113

Attn: Kathleen Teuscher



Authorized for release by:

11/5/2012 9:43:03 PM

Jeffrey Smith

Project Manager II

jeff.smith@testamericainc.com

LINKS

Review your project
results through

Total Access

Have a Question?



Visit us at:

www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Method Summary	6
Sample Summary	7
Detection Summary	8
Client Sample Results	9
QC Sample Results	10
QC Association Summary	11
Lab Chronicle	12
Certification Summary	13
Chain of Custody	14
Receipt Checklists	19

Definitions/Glossary

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
*	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
MDA	Minimum detectable activity
MDC	Minimum detectable concentration
RER	Relative error ratio
DER	Duplicate error ratio (normalized absolute difference)
DLC	Decision level concentration
RL	Reporting Limit or Requested Limit (Radiochemistry only)

Case Narrative

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Job ID: 240-16113-2

Laboratory: TestAmerica Canton

4

Narrative

CASE NARRATIVE

Client: TRC Environmental Corp-Payne Firm

Project: Canton Drop Forge

Report Number: 240-16113-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

TestAmerica utilizes USEPA approved methods, where applicable, in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated and were analyzed in accordance with Ohio Voluntary Action Program protocols, where applicable.

A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/09/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.6, 3.2, 3.5, 3.5 and 4.0 C.

TOTAL METALS (ICP)

Sample IA03/B-03/10-12 (240-16113-14) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 11/01/2012 and analyzed on 11/02/2012.

Barium was detected in method blank MB 240-63525/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

TOTAL MERCURY

Sample IA03/B-03/10-12 (240-16113-14) was analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 10/10/2012 and analyzed on 10/11/2012.

TestAmerica Canton
11/5/2012

Case Narrative

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Job ID: 240-16113-2 (Continued)

Laboratory: TestAmerica Canton (Continued)

4

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

Method Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL NC
7471A	Mercury (CVAA)	SW846	TAL NC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NC = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

5

Sample Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-16113-14	IA03/B-03/10-12	Solid	10/08/12 14:55	10/09/12 07:25



6



Detection Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Client Sample ID: IA03/B-03/10-12

Lab Sample ID: 240-16113-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Barium	93	B	23	0.081	mg/Kg	1	*	6010B	Total/NA	
Cadmium	0.041	J	0.23	0.041	mg/Kg	1	*	6010B	Total/NA	
Chromium	11		0.57	0.23	mg/Kg	1	*	6010B	Total/NA	
Arsenic	11		1.1	0.34	mg/Kg	1	*	6010B	Total/NA	
Lead	15		0.34	0.22	mg/Kg	1	*	6010B	Total/NA	
Mercury	0.031	J	0.10	0.016	mg/Kg	1	*	7471A	Total/NA	

Client Sample Results

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Client Sample ID: IA03/B-03/10-12

Lab Sample ID: 240-16113-14

Date Collected: 10/08/12 14:55

Matrix: Solid

Date Received: 10/09/12 07:25

Percent Solids: 84.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	93	B	23	0.081	mg/Kg	*	11/01/12 12:34	11/02/12 09:45	1
Cadmium	0.041	J	0.23	0.041	mg/Kg	*	11/01/12 12:34	11/02/12 09:45	1
Chromium	11		0.57	0.23	mg/Kg	*	11/01/12 12:34	11/02/12 09:45	1
Silver	ND		0.57	0.11	mg/Kg	*	11/01/12 12:34	11/02/12 09:45	1
Arsenic	11		1.1	0.34	mg/Kg	*	11/01/12 12:34	11/02/12 09:45	1
Lead	15		0.34	0.22	mg/Kg	*	11/01/12 12:34	11/02/12 09:45	1
Selenium	ND		0.57	0.51	mg/Kg	*	11/01/12 12:34	11/02/12 09:45	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.031	J	0.10	0.016	mg/Kg	*	10/10/12 14:20	10/11/12 14:24	1

QC Sample Results

Client: TRC Environmental Corp-Payne Firm
 Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-63525/1-A

Matrix: Solid

Analysis Batch: 63723

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 63525

Analyte	MB	MB	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium		0.0971	J		20	0.071	mg/Kg		11/01/12 12:34	11/02/12 09:33	1
Cadmium		ND			0.20	0.036	mg/Kg		11/01/12 12:34	11/02/12 09:33	1
Chromium		ND			0.50	0.20	mg/Kg		11/01/12 12:34	11/02/12 09:33	1
Silver		ND			0.50	0.10	mg/Kg		11/01/12 12:34	11/02/12 09:33	1
Arsenic		ND			1.0	0.30	mg/Kg		11/01/12 12:34	11/02/12 09:33	1
Lead		ND			0.30	0.19	mg/Kg		11/01/12 12:34	11/02/12 09:33	1
Selenium		ND			0.50	0.45	mg/Kg		11/01/12 12:34	11/02/12 09:33	1

Lab Sample ID: LCS 240-63525/2-A

Matrix: Solid

Analysis Batch: 63723

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 63525

Analyte	Spike	LCS		Unit	D	%Rec.		Limits
		Added	Result			%Rec		
Barium		200	198	mg/Kg		99	80 - 120	
Cadmium		5.00	4.97	mg/Kg		99	80 - 120	
Chromium		20.0	20.1	mg/Kg		100	80 - 120	
Silver		5.00	5.10	mg/Kg		102	80 - 120	
Arsenic		200	197	mg/Kg		98	80 - 120	
Lead		50.0	49.2	mg/Kg		98	80 - 120	
Selenium		200	191	mg/Kg		95	80 - 120	

Lab Sample ID: 240-16113-14 MS

Matrix: Solid

Analysis Batch: 63723

Client Sample ID: IA03/B-03/10-12

Prep Type: Total/NA

Prep Batch: 63525

Analyte	Sample	Sample	Spike	MS		Unit	D	%Rec.		Limits
	Result	Qualifier	Added	Result	Qualifier			%Rec	Limits	
Barium	93	B	212	276		mg/Kg	⊗	87	75 - 125	
Cadmium	0.041	J	5.29	4.44		mg/Kg	⊗	84	75 - 125	
Chromium	11		21.2	30.0		mg/Kg	⊗	88	75 - 125	
Silver	ND		5.29	4.53		mg/Kg	⊗	86	75 - 125	
Arsenic	11		212	187		mg/Kg	⊗	83	75 - 125	
Lead	15		52.9	58.1		mg/Kg	⊗	82	75 - 125	
Selenium	ND		212	165		mg/Kg	⊗	78	75 - 125	

Lab Sample ID: 240-16113-14 MSD

Matrix: Solid

Analysis Batch: 63723

Client Sample ID: IA03/B-03/10-12

Prep Type: Total/NA

Prep Batch: 63525

Analyte	Sample	Sample	Spike	MSD		Unit	D	%Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier			%Rec	Limits	RPD	Limit
Barium	93	B	212	297		mg/Kg	⊗	96	75 - 125	7	20
Cadmium	0.041	J	5.29	4.73		mg/Kg	⊗	89	75 - 125	6	20
Chromium	11		21.2	32.9		mg/Kg	⊗	102	75 - 125	9	20
Silver	ND		5.29	4.79		mg/Kg	⊗	91	75 - 125	6	20
Arsenic	11		212	199		mg/Kg	⊗	89	75 - 125	7	20
Lead	15		52.9	61.4		mg/Kg	⊗	88	75 - 125	5	20
Selenium	ND		212	178		mg/Kg	⊗	84	75 - 125	8	20



QC Association Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Metals

Prep Batch: 60833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16113-14	IA03/B-03/10-12	Total/NA	Solid	7471A	60833

Analysis Batch: 61076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16113-14	IA03/B-03/10-12	Total/NA	Solid	7471A	60833

Prep Batch: 63525

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16113-14	IA03/B-03/10-12	Total/NA	Solid	3050B	63525
240-16113-14 MS	IA03/B-03/10-12	Total/NA	Solid	3050B	63525
240-16113-14 MSD	IA03/B-03/10-12	Total/NA	Solid	3050B	63525
LCS 240-63525/2-A	Lab Control Sample	Total/NA	Solid	3050B	63525
MB 240-63525/1-A	Method Blank	Total/NA	Solid	3050B	63525

Analysis Batch: 63723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16113-14	IA03/B-03/10-12	Total/NA	Solid	6010B	63525
240-16113-14 MS	IA03/B-03/10-12	Total/NA	Solid	6010B	63525
240-16113-14 MSD	IA03/B-03/10-12	Total/NA	Solid	6010B	63525
LCS 240-63525/2-A	Lab Control Sample	Total/NA	Solid	6010B	63525
MB 240-63525/1-A	Method Blank	Total/NA	Solid	6010B	63525

Lab Chronicle

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Client Sample ID: IA03/B-03/10-12

Lab Sample ID: 240-16113-14

Date Collected: 10/08/12 14:55

Matrix: Solid

Date Received: 10/09/12 07:25

Percent Solids: 84.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			60833	10/10/12 14:20	DE	TAL NC
Total/NA	Analysis	7471A		1	61076	10/11/12 14:24	DH	TAL NC
Total/NA	Prep	3050B			63525	11/01/12 12:34	DE	TAL NC
Total/NA	Analysis	6010B		1	63723	11/02/12 09:45	KC	TAL NC

Laboratory References:

TAL NC = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: TRC Environmental Corp-Payne Firm
Project/Site: Canton Drop Forge

TestAmerica Job ID: 240-16113-2

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAC	9	01144CA	06-30-13
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAC	4	E87225	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAC	5	200004	07-31-13
Kansas	NELAC	7	E-10336	01-31-13
Kentucky	State Program	4	58	11-16-12
L-A-B	DoD ELAP		L2315	02-28-13
Minnesota	NELAC	5	039-999-348	12-31-12
Nevada	State Program	9	OH-000482008A	07-31-13
New Jersey	NELAC	2	OH001	06-30-13
New York	NELAC	2	10975	04-01-13
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAC	3	68-00340	08-31-13
Texas	NELAC	6		08-03-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAC	3	460175	09-14-13
Washington	State Program	10	C971	01-12-13
West Virginia DEP	State Program	3	210	12-31-12
Wisconsin	State Program	5	999518190	08-31-13

12

Chain of Custody Record

TestAmerica Laboratory location: North Canton, OH
Regulatory program: DW NPDES RCRA Other Ohio VAP

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

COC No: 024401

Client Contact		Client Project Manager:		Site Contact:		Lab Contact:		TestAmerica Laboratories, Inc.																
Company Name: TRC		Kathie Teuscher		Mike Bitto		Jeff Smith		COC No: 024401																
Address: 1382 W 9th St, Suite 200		Telephone: 216-344-3072		Telephone: 216-344-3072		Telephone: 330-497-9396		1 of 3 COCs																
City/State/Zip: Cleveland, OH 44113		Email: KTeuscher@trcsolutions.com																						
Phone: 216-344-3072																								
Project Name: Canton Drop Forge		Method of Shipment/Carrier: Drop-off																						
Project Number: 196663		Shipping/Tracking No:																						
P.O # TBD																								
Sample Identification		Sample Date	Sample Time	Air	Anemone	Sediment	Field	Other:	H2SO4	INO3	HCl	NaOH	ZnAc ₂	NaOH	Others	Other: Date	VOC	SVOC	PCB	RCRA Metals *	TPH-DKQ	TPH-G-RQ	Analyses	Sample Specific Notes / Special Instructions:
IA01/B-04/0-2		10/8/12	1055		X																			* Aqueous samples to be analyzed for Dissolved RCRA 8 metals, Field filtered.
IA01/B-03/0-2			1105		X																			
IA01/B-02/0-2			1115		X																			
IA07/SW-02			1120		X																			
IA03/B-05/0-2			1150		X																			
IA03/B-05/10-12			1225		X																			
IA03/B-06/6 ^{TPK} -8-10			1300		X																			
IA06/B-02/4-6			1330		X																			
IA07/SW-02			1350		X			13																
IA03/B-04/0-2			1415		X																			
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B		<input checked="" type="checkbox"/> Unknown		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		<input type="checkbox"/> Return to Client		<input checked="" type="checkbox"/> Disposal By Lab		<input type="checkbox"/> Archive For		Months				
Special Instructions/QC Requirements & Comments:																								
Ohio VAP																								
Relinquished by: <i>Allie R</i>	Company: TRC	Date/Time: 10/3/12 10125	Received by:																	Company:	Date/Time:			
Relinquished by: <i>J</i>	Company:	Date/Time:	Received by:																	Company:	Date/Time:			
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: <i>Terry Burns</i>																	Company:	Date/Time:			
																				TAL 0018-1 (04/10)				

Chain of Custody Record

TestAmerica Laboratory location:

North Canton, OH

Regulatory program:

DW NPDES RCRA

Other *Ohio VAP*

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

COC No: **024402**

2 of **3** COCs

Client Contact

Company Name: **TRC**
Address: **1382 W 9th St Suite 200**
City/State/Zip: **Cleveland, OH 44113**
Phone: **216-344-3072**

Project Name: **Canton Drop Forge**
Project Number: **196663**
PO # **TBD**

Client Project Manager: **Katrice Teuscher**
Telephone: **216-344-3072**
Email: **KTeuscher@trc-solutions.com**

Method of Shipment/Carrier: **Drop-off**

Shipping/Tracking No:

Site Contact: **Mike Bitko**
Telephone: **216-344-3072**

Lab Contact: **Jeff Smith**
Telephone: **330-497-9396**

TAT if different from below: **2 days**

- 3 weeks
- 2 weeks
- 1 week
- 2 days
- 1 day

Analyses

PCB
PCB/PCN
201

Chain of Custody Record

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

COC No: **024403**

Client Contact		TestAmerica Laboratory location: Regulatory program:		Site Contact		Lab Contact:					
Company Name: TRC		Client Project Manager: Kathie Teuscher		Site Contact: Nike Bitya		Lab Contact: Jef R Smith					
Address: 1382 W 9th St, Suite 200		Telephone: 216-344-3072		Telephone: 216-344-3072		Telephone: 330-497-9396					
City/State/Zip: Cleveland, OH 44113		Email: K.Teuscher@resolutions.com									
Phone: 216-344-3072											
Project Name: Canton Drop Forge		Method of Shipment/Carrier: Drop-off		Shipping/Tracking No:							
Project Number: 196663											
PO# TBD											
Sample Identification		Sample Date	Sample Time	Air	Atmos	Sediment	Salt	Other:	100% Recovery	Sample Specific Notes / Special Instructions:	
IA06/SW-01		10/8/12	1700	X						* Aqueous samples	
DVP-01/100812					X					* to be analyzed	
TB-01/100812					X					for Dissolved	
TB-02/100812					X					RCRA 8 Metals,	
TB-03/100812					X					Field Filtered	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard	<input type="checkbox"/> Flammable	<input type="checkbox"/> Skin Irritant	<input type="checkbox"/> Poison B	<input checked="" type="checkbox"/> Unknown	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)				
Special Instructions/QC Requirements & Comments:		Ohio VAP									
Relinquished by: <i>Kathie B.</i>		Company: TRC	Date/Time: 10/9/12 10:25	Received by:			Company:	Date/Time:			
Relinquished by:		Company:	Date/Time:	Received by:			Company:	Date/Time:			
Relinquished by:		Company:	Date/Time:	Received in Laboratory by: <i>Ernest Burns</i>			Company: TA	Date/Time: 10/9/12 07:25			
TAL 0018-1 (04/10)											

TestAmerica Canton-Sample Receipt Form/Narrative

Login #: 16113

Client TLC

Site Name

By: Cly

(Signature)

Cooler Received on 10-9-12 Opened on 10-9-12 (Signature)
FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other
TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____
Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
COOLANT: Wet Ice Blue Ice Dry Ice Water None

- | | | | | |
|---|---|---------------------------------|----|---------------------|
| 1. Cooler temperature upon receipt | IR GUN# 1 (CF 0°C) Observed Sample Temp. _____ °C | Corrected Sample Temp. _____ °C | X | Multiple
on Back |
| | IR GUN# 4G (CF -1°C) Observed Sample Temp. _____ °C | Corrected Sample Temp. _____ °C | | |
| | IR GUN# 5G (CF -1°C) Observed Sample Temp. _____ °C | Corrected Sample Temp. _____ °C | | |
| | IR GUN# 8 (CF 0°C) Observed Sample Temp. _____ °C | Corrected Sample Temp. _____ °C | | |
| 2. Were custody seals on the outside of the cooler(s)? If Yes Quantity <u>5</u> | <input checked="" type="radio"/> Yes | No | | |
| -Were custody seals on the outside of the cooler(s) signed & dated? | <input checked="" type="radio"/> Yes | No | NA | |
| -Were custody seals on the bottle(s)? | <input checked="" type="radio"/> Yes | No | | |
| -Were custody seals on the bottle(s)? | <input checked="" type="radio"/> Yes | No | | |
| 3. Shippers' packing slip attached to the cooler(s)? | <input checked="" type="radio"/> Yes | No | | |
| 4. Did custody papers accompany the sample(s)? | <input checked="" type="radio"/> Yes | No | | |
| 5. Were the custody papers relinquished & signed in the appropriate place? | <input checked="" type="radio"/> Yes | No | | |
| 6. Did all bottles arrive in good condition (Unbroken)? | <input checked="" type="radio"/> Yes | No | | |
| 7. Could all bottle labels be reconciled with the COC? | <input checked="" type="radio"/> Yes | No | | |
| 8. Were correct bottle(s) used for the test(s) indicated? | <input checked="" type="radio"/> Yes | No | | |
| 9. Sufficient quantity received to perform indicated analyses? | <input checked="" type="radio"/> Yes | No | | |
| 10. Were sample(s) at the correct pH upon receipt? | <input checked="" type="radio"/> Yes | No | NA | |
| 11. Were VOAs on the COC? | <input checked="" type="radio"/> Yes | No | | |
| 12. Were air bubbles >6 mm in any VOA vials? | Yes <input checked="" type="radio"/> | NA | | |
| 13. Was a trip blank present in the cooler(s)? | <input checked="" type="radio"/> Yes | No | | |

13

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) were received in a broken container.

Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). Nitric Acid Lot# 031512-HNO₃; Sulfuric Acid Lot# 041911-H₂SO₄; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH₃COO)₂ZN/NaOH. What time was preservative added to sample(s)? _____

13

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant
TA NO #	2.6	2.6	8	ice
TA NO #	3.5	3.5		
Chenf	4.0	4.0		
L-774	3.2	3.2		
TA NO #	3.5	3.5		

Login Sample Receipt Checklist

Client: TRC Environmental Corp-Payne Firm

Job Number: 240-16113-2

Login Number: 16113

List Source: TestAmerica Canton

List Number: 1

Creator: Livengood, Chris

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	REFER TO COOLER RECEIPT FORM
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	N/A	
COC is present.	N/A	
COC is filled out in ink and legible.	N/A	
COC is filled out with all pertinent information.	N/A	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	N/A	
Samples are received within Holding Time.	N/A	
Sample containers have legible labels.	N/A	
Containers are not broken or leaking.	N/A	
Sample collection date/times are provided.	N/A	
Appropriate sample containers are used.	N/A	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	